

REMARKS

Claims 1-17 are pending in the application. Claims 1 and 10 were amended to more particularly point out and distinctly claim the present invention. Claims 4 and 13 were amended solely to improve their form.

Support for the new phrase, “the fluid portion being an area” is provided on at least page 36, line 25 through page 37, line 20 of the specification. Support for the new “radial” word in claims 1 and 10 is provided on at least page 42, line 21 of the specification. The new word “modulus” in claim 10 appears throughout the specification. Therefore, no new matter has been added.

Prior Art Rejections

Claims 1-6 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brock-Fisher *et al.*, (hereafter “Brock-Fisher”) in view of Bonnefous and Guracar *et al.* (hereafter, “Guracar”)

Claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brock-Fisher in view of Bonnefous and Guracar.

Claims 10-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brock-Fisher in view of Bonnefous and Guracar¹.

Claims 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brock-Fisher in view of Bonnefous and Guracar.

Applicants respectfully traverse these rejections.

1. Patentability of independent claims 1 and 10 over applied references

Amended claim 1 reads, in part, as follows (underlining for emphasis):

¹ The grounds of the outstanding rejection of claims 10-15 do not include Guracar. However, the detailed explanation of the claim 10 rejection on page 10 of the Office Action refers to Guracar as providing the “radius” (now, “radial”) limitation. Accordingly, the proper grounds of rejection appears to be Brock-Fisher in view of Bonnefous and Guracar.

...a fluid portion within the blood vessel, the fluid portion being an area...
a fluid determining section for determining the fluid portion in the object to be measured...; and
an image data generating section for generating image data for two-dimensionally image-displaying the deformation amounts and/or elastic moduli of the object to be measured in a region other than the fluid portion by using the information determined by the fluid determining section.

Amended claim 10 reads, in part, as follows (underlining added for emphasis):

(A) ...a fluid portion within the blood vessel, the fluid portion being an area...
(D) determining the fluid portion in the object to be measured...; and
(E) generating image data for two-dimensionally image-displaying the deformation amount and/or elastic modulus of the object to be measured in a region other than the fluid portion by using information of the fluid portion determined in step (D)

On page 3 of the outstanding Office Action, the Examiner states that column 4, lines 38-48 of Brock-Fisher teaches a fluid determining section for determining a fluid portion in the object to be measured in accordance with the phase-detected signal. Applicants respectfully disagree. This text portion of Brock-Fisher reads as follows (underlining added for emphasis):

Accordingly, as coherent phase comparative procedure 70 steps along through the time segments of lines 1 and 2, the first time segment to show the phase change relationship indicates the time point at which the boundary between tissue and blood is detected. The time segment of the phase change signal is then related to the remaining signals of the ultrasound image, allowing the position of the boundary in the image to be determined. The resultant detected boundary can then be enhanced by, for example, assignment of a color value to the picture elements that define the boundary region.

Referring to Fig. 2 of Brock-Fisher, this text portion merely discloses a procedure which determines the location of the boundary layer 22 between the tissue region 10 and the blood region 12. This text portion does not disclose or suggest determining a fluid portion that is an area, such as shown in region 76a' in Fig. 8 of the present specification. That is, a mere boundary or boundary region does not provide any information regarding a fluid portion that is an area. Brock-Fisher thus cannot disclose or suggest the above-identified claim limitations. Nor do any of the other applied references make up for this deficiency in Brock-Fisher. Accordingly, claims 1 and 10 are patentable over the applied combination of references.

2. Patentability of dependent claims over the cited prior art

The dependent claims are believed to be patentable over the applied references for at least the reason they are dependent upon patentable base claims and because the recite additional patentable elements and steps. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejections to claims 2-9 and 11-17.

Conclusion

Insofar as the Examiner's rejections and objections were fully addressed, the present application is in condition for allowance. Issuance of a Notice of Allowability of all pending claims is therefore requested.

Respectfully submitted,

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